<110>   Chano, Tokuhiro
         Okabe, Hidetoshi
         Ikegawa, Shiro

<120>   RB1 gene induced protein (RB1CC1) and gene

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<140>   US 10/516,558
<141>   2004-11-30

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Gln Ser Lys Tyr Lys Ile Ala Ile Gln His Gln Val Leu Val Val Asn
        35   40   45

Gly Gly Glu Cys Met Ala Ala Asp Arg Arg Val Cys Thr Tyr Ser Ala
    50   55   60

Gly Thr Asp Thr Asn Pro Ile Phe Leu Phe Asn Lys Glu Met Ile Leu
65   70   75   80

Cys Asp Arg Pro Pro Ala Ile Pro Lys Thr Thr Phe Ser Thr Glu Asn
                85   90   95

Asp Met Glu Ile Lys Val Glu Glu Ser Leu Met Met Pro Ala Val Phe
                100   105   110

His Thr Val Ala Ser Arg Thr Gln Leu Ala Leu Glu Met Tyr Glu Val
        115   120   125

Ala Lys Lys Leu Cys Ser Phe Cys Glu Gly Leu Val His Asp Glu His
        130   135   140

Leu Gln His Gln Gly Trp Ala Ala Ile Met Ala Asn Leu Glu Asp Cys
145   150   155   160

Ser Asn Ser Tyr Gln Lys Leu Leu Phe Lys Phe Glu Ser Ile Tyr Ser
                165   170   175

Asn Tyr Leu Gln Ser Ile Glu Asp Ile Lys Leu Lys Leu Thr His Leu
            180   185   190

Gly Thr Ala Val Ser Val Met Ala Lys Ile Pro Leu Leu Glu Cys Leu
        195   200   205

Thr Arg His Ser Tyr Arg Glu Cys Leu Gly Arg Leu Asp Ser Leu Pro
    210   215   220

Glu His Glu Asp Ser Glu Lys Ala Glu Thr Lys Arg Ser Thr Glu Leu
225   230   235   240

Val Leu Ser Pro Asp Met Pro Arg Thr Thr Asn Glu Ser Leu Leu Thr
                245   250   255

Ser Phe Pro Lys Ser Val Glu His Val Ser Pro Asp Thr Ala Asp Ala
            260   265   270

Glu Ser Gly Lys Glu Ile Arg Glu Ser Cys Gln Ser Thr Val His Gln
        275   280   285

Gln Asp Glu Thr Thr Ile Asp Thr Lys Asp Gly Asp Leu Pro Phe Phe
        290   295   300

Asn Val Ser Leu Leu Asp Trp Ile Asn Val Gln Asp Arg Pro Asn Asp
305   310   315   320

Val Glu Ser Leu Val Arg Lys Cys Phe Asp Ser Met Ser Arg Leu Asp
                325   330   335

Pro Arg Ile Ile Arg Pro Phe Ile Ala Glu Cys Arg Gln Thr Ile Ala
            340   345   350

Lys Leu Asp Asn Gln Asn Met Lys Ala Ile Lys Gly Leu Glu Asp Arg
            355   360   365

Leu Tyr Ala Leu Asp Gln Met Ile Ala Ser Cys Gly Arg Leu Val Asn
    370   375   380

Glu Gln Lys Glu Leu Ala Gln Gly Phe Leu Ala Asn Gln Lys Arg Ala
385   390   395   400

Glu Asn Leu Lys Asp Ala Ser Val Leu Pro Asp Leu Cys Leu Ser His
            405   410   415

Ala Asn Gln Leu Met Ile Met Leu Gln Asn His Arg Lys Leu Leu Asp
        420   425   430

Ile Lys Gln Lys Cys Thr Thr Ala Lys Gln Glu Leu Ala Asn Asn Leu
    435   440   445

His Val Arg Leu Lys Trp Cys Cys Phe Val Met Leu His Ala Asp Gln
    450   455   460

Asp Gly Glu Lys Leu Gln Ala Leu Leu Arg Leu Val Ile Glu Leu Leu
465   470   475   480

Glu Arg Val Lys Ile Val Glu Ala Leu Ser Thr Val Pro Gln Met Tyr
            485   490   495

Cys Leu Ala Val Val Glu Val Val Arg Arg Lys Met Phe Ile Lys His
        500   505   510

Tyr Arg Glu Trp Ala Gly Ala Leu Val Lys Asp Gly Lys Arg Leu Tyr
    515   520   525

Glu Ala Glu Lys Ser Lys Arg Glu Ser Phe Gly Lys Leu Phe Arg Lys
    530   535   540

Ser Phe Leu Arg Asn Arg Leu Phe Arg Gly Leu Asp Ser Trp Pro Pro
545   550   555   560

Ser Phe Cys Thr Gln Lys Pro Arg Lys Phe Asp Cys Glu Leu Pro Asp
            565   570   575

Ile Ser Leu Lys Asp Leu Gln Phe Leu Gln Ser Phe Cys Pro Ser Glu
        580   585   590

Val Gln Pro Phe Leu Arg Val Pro Leu Leu Cys Asp Phe Glu Pro Leu
        595   600   605

His Gln His Val Leu Ala Leu His Asn Leu Val Lys Ala Ala Gln Ser
    610   615   620

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Leu Asp Glu Met Ser Gln Thr Ile Thr Asp Leu Leu Ser Glu Gln Lys
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Ala Ser Val Ser Gln Thr Ser Pro Gln Ser Ala Ser Ser Pro Arg Met
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Glu Ser Thr Ala Gly Ile Thr Thr Thr Thr Ser Pro Arg Thr Pro Pro
                660             665             670


Pro Leu Thr Val Gln Asp Pro Leu Cys Pro Ala Val Cys Pro Leu Glu
            675             680             685


Glu Leu Ser Pro Asp Ser Ile Asp Ala His Thr Phe Asp Phe Glu Thr
            690             695             700


Ile Pro His Pro Asn Ile Glu Gln Thr Ile His Gln Val Ser Leu Asp
705             710             715             720


Leu Asp Ser Leu Ala Glu Ser Pro Glu Ser Asp Phe Met Ser Ala Val
            725             730             735


Asn Glu Phe Val Ile Glu Glu Asn Leu Ser Ser Pro Asn Pro Ile Ser
            740             745             750


Asp Pro Gln Ser Pro Glu Met Met Val Glu Ser Leu Tyr Ser Ser Val
            755             760             765


Ile Asn Ala Ile Asp Ser Arg Arg Met Gln Asp Thr Asn Val Cys Gly
770             775             780


Lys Glu Asp Phe Gly Asp His Thr Ser Leu Asn Val Gln Leu Glu Arg
785             790             795             800


Cys Arg Val Val Ala Gln Asp Ser His Phe Ser Ile Gln Thr Ile Lys
                805             810             815


Glu Asp Leu Cys His Phe Arg Thr Phe Val Gln Lys Glu Gln Cys Asp
            820             825             830


Phe Ser Asn Ser Leu Lys Cys Thr Ala Val Glu Ile Arg Asn Ile Ile
            835             840             845


Glu Lys Val Lys Cys Ser Leu Glu Ile Thr Leu Lys Glu Lys His Gln
    850             855             860


Lys Glu Leu Leu Ser Leu Lys Asn Glu Tyr Glu Gly Lys Leu Asp Gly
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Leu Ile Lys Glu Thr Glu Glu Asn Glu Asn Lys Ile Lys Lys Leu Lys
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Gly Glu Leu Val Cys Leu Glu Glu Val Leu Gln Asn Lys Asp Asn Glu
            900   905   910

Phe Ala Leu Val Lys His Glu Lys Glu Ala Val Ile Cys Leu Gln Asn
            915   920   925

Glu Lys Asp Gln Lys Leu Leu Glu Met Glu Asn Ile Met His Ser Gln
    930   935   940

Asn Cys Glu Ile Lys Glu Leu Lys Gln Ser Arg Glu Ile Val Leu Glu
945   950   955   960

Asp Leu Lys Lys Leu His Val Glu Asn Asp Glu Lys Leu Gln Leu Leu
            965   970   975

Arg Ala Glu Leu Gln Ser Leu Glu Gln Ser His Leu Lys Glu Leu Glu
            980   985   990

Asp Thr Leu Gln Val Arg His Ile Gln Glu Phe Glu Lys Val Met Thr
        995   1000   1005

Asp His Arg Val Ser Leu Glu Glu Leu Lys Lys Glu Asn Gln Gln
    1010   1015   1020

Ile Ile Asn Gln Ile Gln Glu Ser His Ala Glu Ile Ile Gln Glu
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Lys Glu Lys Gln Leu Gln Glu Leu Lys Leu Lys Val Ser Asp Leu
    1040   1045   1050

Ser Asp Thr Arg Cys Lys Leu Glu Val Glu Leu Ala Leu Lys Glu
    1055   1060   1065

Ala Glu Thr Asp Glu Ile Lys Ile Leu Leu Glu Glu Ser Arg Ala
    1070   1075   1080

Gln Gln Lys Glu Thr Leu Lys Ser Leu Leu Glu Gln Glu Thr Glu
    1085 ·   1090   1095

Asn Leu Arg Thr Glu Ile Ser Lys Leu Asn Gln Lys Ile Gln Asp
    1100   1105   1110

Asn Asn Glu Asn Tyr Gln Val Gly Leu Ala Glu Leu Arg Thr Leu
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Met Thr  Ile Glu Lys Asp Gln  Arg Ile Ser Glu Leu  Ile Ser Arg
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His Glu  Glu Glu Ser Asn Ile  Leu Lys Ala Glu Leu  Asn Lys Val
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Thr Ser  Leu His Asn Gln Ala  Phe Glu Ile Glu Lys  Asn Leu Lys
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Glu Gln  Ile Ile Glu Leu Gln  Ser Lys Leu Asp Ser  Glu Leu Ser
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Ala Leu  Glu Arg Gln Lys Asp  Glu Lys Ile Thr Gln  Gln Glu Glu
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Lys Tyr  Glu Ala Ile Ile Gln  Asn Leu Glu Lys Asp  Arg Gln Lys
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Leu Val  Ser Ser Gln Glu Gln  Asp Arg Glu Gln Leu  Ile Gln Lys
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Leu Asn  Cys Glu Lys Asp Glu  Ala Ile Gln Thr Ala  Leu Lys Glu
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Phe Lys  Leu Glu Arg Glu Val  Val Glu Lys Glu Leu  Leu Glu Lys
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Val Lys  His Leu Glu Asn Gln  Ile Ala Lys Ser Pro  Ala Ile Asp
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Ser Thr  Arg Gly Asp Ser Ser  Ser Leu Val Ala Glu  Leu Gln Glu
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Lys Leu  Gln Glu Glu Lys Ala  Lys Phe Leu Glu Gln  Leu Glu Glu
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Gln Glu  Lys Arg Lys Asn Glu  Glu Met Gln Asn Val  Arg Thr Ser
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Leu Ile  Ala Glu Gln Gln Thr  Asn Phe Asn Thr Val  Leu Thr Arg
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Glu Lys  Met Arg Lys Glu Asn  Ile Ile Asn Asp Leu  Ser Asp Lys
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Leu Lys  Ser Thr Met Gln Gln  Gln Glu Arg Asp Lys  Asp Leu Ile
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Ala  Asp  Glu  Gly  Arg  Val  Asp  Ser  Ala  Met  Glu  Thr  Ser  Met  Met
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Ser  Val  Gln  Glu  Asn  Ile  His  Met  Leu  Ser  Glu  Glu  Lys  Gln  Arg
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Ile  Met  Leu  Leu  Glu  Arg  Thr  Leu  Gln  Leu  Lys  Glu  Glu  Glu  Asn
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Lys  Arg  Leu  Asn  Gln  Arg  Leu  Met  Ser  Gln  Ser  Met  Ser  Ser  Val
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Tyr  Cys  Gln  Ala  Lys  Lys  Ala  Gln  Asn  Arg  Phe  Lys  Val  Pro  Leu
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Gln Ser Lys Tyr Lys Ile Ala Ile Gln His Gln Val Leu Val Val Asn
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Gly Gly Glu Cys Met Ala Ala Asp Arg Arg Val Cys Thr Tyr Ser Ala
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Gly Thr Asp Thr Asn Pro Ile Phe Leu Phe Asn Lys Glu Met Ile Leu
65                  70                  75                  80

Cys Asp Arg Ala Pro Ala Ile Pro Lys Ala Thr Phe Ser Thr Glu Asn
                85                  90                  95

Asp Met Glu Ile Lys Val Glu Glu Ser Leu Met Met Pro Ala Val Phe
            100                 105                 110

His Thr Val Ala Ser Arg Thr Gln Leu Ala Val Glu Met Tyr Asp Val
        115                 120                 125

Ala Lys Lys Leu Cys Ser Phe Cys Glu Gly Leu Val His Asp Glu His
    130                 135                 140

Leu Gln His Gln Gly Trp Ala Ala Ile Met Ala Asn Leu Glu Asp Cys
145                 150                 155                 160

Ser Asn Ser Tyr Gln Lys Leu Leu Phe Lys Phe Glu Ser Ile Tyr Ser
                165                 170                 175

Asp Tyr Leu Gln Ser Ile Glu Asp Ile Lys Leu Lys Leu Thr His Leu
            180                 185                 190

Gly Thr Ala Val Ser Val Met Ala Lys Ile Pro Leu Leu Glu Cys Leu
        195                 200                 205
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Thr Arg His Ser Tyr Arg Glu Cys Leu Gly Arg Pro Asp Ser Leu Asn
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Glu His Glu Gly Ser Glu Lys Ala Glu Met Lys Arg Ser Thr Glu Leu
225             230             235                     240

Val Leu Ser Pro Asp Met Pro Arg Thr Thr Asn Thr Ser Leu Val Thr
                245             250             255

Ser Phe His Lys Ser Met Glu His Val Ala Pro Asp Pro Thr Gly Thr
            260             265             270

Glu Arg Gly Lys Glu Leu Arg Glu Ser Cys Gln Ser Thr Val Gln Gln
        275             280             285

Glu Glu Ala Ser Val Asp Ala Lys Asp Ser Asp Leu Pro Phe Phe Asn
    290             295             300

Val Ser Leu Leu Asp Trp Ile Asn Val Gln Asp Arg Pro Asn Asp Val
305             310             315                     320

Glu Ser Leu Val Arg Lys Cys Phe Asp Ser Met Ser Arg Leu Asp Pro
            325             330             335

Lys Ile Ile Gln Pro Phe Met Leu Glu Cys His Gln Thr Ile Ala Lys
            340             345             350

Leu Asp Asn Gln Asn Met Lys Ala Ile Lys Gly Leu Glu Asp Arg Leu
        355             360             365

Tyr Ala Leu Asp Gln Met Ile Ala Ser Cys Ser Arg Leu Val Asn Glu
    370             375             380

Gln Lys Glu Leu Ala Gln Gly Phe Leu Ala Asn Gln Met Arg Ala Glu
385             390             395             400

Asn Leu Lys Asp Ala Ser Val Leu Pro Asp Leu Cys Leu Ser His Ala
            405             410             415

Asn Gln Leu Met Ile Met Leu Gln Asn His Arg Lys Leu Leu Asp Ile
            420             425             430

Lys Gln Lys Cys Thr Thr Ala Lys Gln Glu Leu Ala Asn Asn Leu His
            435             440             445

Val Arg Leu Lys Trp Cys Cys Phe Val Met Leu His Ala Asp Gln Asp
    450             455             460
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Gly Glu Lys Leu Gln Ala Leu Leu Arg Leu Val Ile Glu Leu Leu Glu
465               470               475               480


Arg Val Arg Ile Val Glu Ala Leu Ser Thr Val Pro Gln Met Tyr Cys
                485               490               495


Leu Ala Val Val Glu Val Val Arg Arg Lys Met Phe Ile Lys His Tyr
            500               505               510


Arg Glu Trp Ala Gly Ala Leu Val Lys Asp Gly Lys Gln Leu Tyr Glu
            515               520               525


Ala Glu Lys Ser Lys Arg Glu Ser Phe Gly Lys Leu Phe Arg Lys Ser
    530               535               540


Phe Leu Arg Asn Arg Leu Phe Lys Gly Leu Asp Ser Trp Pro Ser Ser
545               550               555               560


Phe Cys Thr Gln Lys Pro Arg Lys Phe Asp Cys Glu Leu Pro Asp Ile
                565               570               575


Ser Leu Lys Asp Leu Gln Phe Leu Gln Ser Phe Cys Pro Ser Glu Val
            580               585               590


Gln Pro Phe Leu Arg Val Pro Leu Leu Cys Asp Phe Glu Pro Leu His
            595               600               605


Gln His Val Leu Ala Leu His Asn Leu Val Lys Ala Ala Gln Ser Leu
    610               615               620


Asp Glu Met Ser Gln Thr Ile Thr Asp Leu Leu Asn Glu Gln Lys Val
625               630               635               640


Ser Thr Ser Gln Ala Ser Pro Gln Ser Ala Ala Ser Pro Arg Ile Glu
                645               650               655


Ser Thr Thr Gly Ile Thr Thr Thr Ser Pro Lys Thr.Pro Pro Pro
            660               665               670


Leu Thr Val Gln Asp Thr Leu Cys Pro Ala Val Cys Pro Leu Glu Glu
            675               680               685


Leu Ser Pro Asp Ser Ile Asp Ala His Thr Phe Asp Phe Glu Thr Ile
    690               695               700


Ser His Pro Asn Thr Glu Gln Pro Val His Gln Ala Ser Ile Asp Leu
705               710               715               720
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Asp Ser Leu Ala Glu Ser Pro Glu Ser Asp Phe Met Ser Ala Val Asn
            725   730   735

Glu Phe Val Ile Glu Glu Asn Leu Ser Ser Pro Asn Pro Ile Ser Asp
            740   745   750

Pro Gln Ser Pro Glu Met Met Val Glu Ser Leu Tyr Ser Ser Val Ile
            755   760   765

Asn Ala Ile Asp Ser Arg Arg Met Gln Asp Thr Ser Thr Arg Gly Asn
770   775   780

Glu Gly Phe Gly Asp Arg Ala Ala Leu His Val Gln Leu Glu Lys Cys
785   790   795   800

Arg Ala Ala Ala Gln Asp Ser His Thr Ser Ile Gln Thr Ile Lys Asp
            805   810   815

Asp Leu Cys His Phe Arg Thr Phe Val Gln Lys Glu Gln Cys Asp Leu
            820   825   830

Ala Asn Tyr Leu Lys Cys Thr Ala Val Glu Ile Arg Asn Ile Ile Glu
            835   840   845

Lys Val Lys Cys Ser Leu Glu Ile Thr Leu Lys Glu Lys His Gln Gln
850   855   860

Glu Leu Gln Ser Leu Lys Ile Glu Tyr Glu Cys Lys Leu Asp Ala Leu
865   870   875   880

Val Lys Asp Ser Glu Glu Asn Val Asn Lys Ile Leu Lys Leu Lys Glu
            885   890   895

Asn Leu Val Ser Leu Glu Glu Ala Leu Gln Asn Lys Asp Asn Glu Phe
            900   905   910

Thr Ser Ile Lys His Glu Lys Asp Ala Ile Val Cys Val Gln Gln Glu
            915   920   925

Lys Asp Gln Lys Leu Leu Glu Met Glu Lys Ile Met His Thr Gln His
            930   935   940

Cys Glu Ile Lys Glu Leu Lys Gln Ser Arg Glu Met Ala Leu Glu Asp
945   950   955   960

Leu Lys Lys Leu His Asp Glu Lys Ile Glu Ser Leu Arg Ala Glu Phe
                965   970   975

Gln Cys Leu Glu Glu Asn His Leu Lys Glu Leu Glu Asp Thr Leu His
            980   985   990

Ile Arg His Thr Gln Glu Phe Glu Lys Val Met Thr Asp His Asn Met
        995   1000   1005

Ser Leu Glu Lys Leu Lys Lys Glu Asn Gln Gln Arg Ile Asp Gln
    1010   1015   1020

Met Leu Glu Ser His Ala Ser Thr Ile Gln Glu Lys Glu Gln Gln
    1025   1030   1035

Leu Gln Glu Leu Lys Leu Lys Val Ser Asp Leu Ser Asp Met Arg
    1040   1045   1050

Cys Lys Leu Glu Val Glu Leu Ala Leu Lys Glu Ala · Glu Thr Asp
    1055   1060   1065

Glu Ile Lys Ile Leu Leu Glu Glu Ser Arg Thr Gln Gln Lys Glu
    1070   1075   1080

Met Leu Lys Ser Leu Leu Glu Gln Glu Thr Glu Asn Leu Arg Thr
    1085   1090   1095

Glu Ile Ser Lys Leu Asn Gln Lys Ile His Asp Asn Asn Glu Ser
    1100   1105   1110

Tyr Gln Val Gly Leu Ser Glu Leu Arg Ala Leu Met Thr Ile Glu
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Lys Asp Gln Cys Ile Ser Glu Leu Ile Ser Arg His Glu Glu Glu
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Ser Asn Ile Leu Lys Ala Glu Leu Asp Asn Val Thr Ser Leu His
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Arg Gln Ala Tyr Glu Ile Glu Lys Lys Leu Lys Glu Gln Ile Val
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Glu Leu Gln Thr Arg Leu Asn Ser Glu Leu Ser Ala Leu Glu Lys
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Gln Lys Asp Glu Lys Ile Thr Gln Gln Glu Glu Lys Tyr Glu Ala
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Leu Ile  Gln Asn Leu Glu Lys  Asp Lys Glu Arg Leu  Val Lys Asn
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    1220                 1225                 1230

Lys Asn  Lys Ala Val Gln Thr  Ala Leu Asp Glu Phe  Lys Val Glu
    1235                 1240                 1245

Arg Glu  Leu Val Glu Lys Glu  Leu Leu Glu Lys Val  Lys His Leu
    1250                 1255                 1260

Glu Asn  Gln Ile Ala Lys Thr  Pro Ala Phe Glu Ser  Ala Arg Glu
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Asp Ser  Ser Ser Leu Val Ala  Glu Leu Gln Glu Lys  Leu Gln Glu
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Glu Lys  Ala Lys Phe Leu Glu  Gln Leu Glu Glu Gln  Glu Lys Arg
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Lys Asn  Glu Glu Met Gln Asn  Val Arg Thr Ser Leu  Ile Ala Glu
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Gln Gln  Thr Asn Phe Asn Thr  Val Leu Thr Arg Glu  Lys Met Arg
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Lys Glu  Asn Ile Ile Asn Asp  Leu Ser Asp Lys Leu  Lys Ser Thr
    1340                 1345                 1350

Met Gln  Gln Gln Glu Arg Asp  Lys Asp Leu Ile Glu  Ser Leu Ser
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Glu Asp  Arg Ala Arg Leu Leu  Glu Glu Lys Lys Gln  Leu Glu Glu
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Glu Val  Ser Lys Leu Arg Thr  Ser Ser Phe Leu Ser  Ser Ala Pro
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Val Ala  Ala Ala Pro Glu Leu  Tyr Gly Ala Cys Ala  Pro Glu Leu
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Pro Gly  Glu Pro Glu Arg Ser  Val Met Glu Thr Ala  Asp Glu Gly
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Arg Leu  Asp Ser Ala Met Glu  Thr Ser Met Met Ser  Val Gln Glu
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Asn Met  Leu Ser Glu Glu Lys  Gln Arg Ile Met Leu  Leu Glu Arg
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Thr Leu  Gln Leu Lys Glu Glu  Glu Asn Lys Arg Leu  Asn Gln Arg
    1460                 1465                 1470


Leu Met  Ser Gln Ser Leu Ser  Ser Val Ser Ser Arg  His Ser Glu
    1475                 1480                 1485


Lys Ile  Ala Ile Arg Asp Phe  Gln Val Gly Asp Leu  Val Leu Ile
    1490                 1495                 1500


Ile Leu  Asp Glu Arg His Asp  Asn Tyr Val Leu Phe  Thr Val Ser
    1505                 1510                 1515


Pro Thr  Leu Tyr Phe Leu His  Ser Glu Ser Leu Pro  Ala Leu Asp
    1520                 1525                 1530


Leu Lys  Pro Gly Glu Gly Ala  Ser Gly Ala Ser Arg  Arg Pro Trp
    1535                 1540                 1545


Val Leu  Gly Lys Val Met Glu  Lys Glu Tyr Cys Gln  Ala Lys Lys
    1550                 1555                 1560


Ala Gln  Asn Arg Phe Lys Val  Pro Leu Gly Thr Lys  Phe Tyr Arg
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ccaaatctcc cacctgaaaa                                                    20



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ctagacgaac gccatgacaa                                                    20


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tgagcactgc aggacaaatc a                                                  21


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aaactcagaa aaccggcaac   20

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taagcatgcc attcaaagca                                                    20


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tttctttata cagggaagtc ttt                                                23


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ttttcagaat gccttgaaga t                                                  21


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aggataccat catcctagac gaa                                                23


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cttaccaccc tcacctggtt                                           20


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ttttgtattt taagtttagg aactgc                                    26


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ataggataca aatccaattt ttc                                       23


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aaaatatagg atacaaatcc aatgaca                                   27


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aaaggatgca tctgtattac ctga                                      24


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gccaacctgg aggactgtt                                          19


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<400>  53
ggttctctga gtttcaccag taa                                     23


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<400>  54
atcaacactg gagggtgagg                                         20


<210>  55
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atcatcatga agttatatgt gtttctgg                                28


<210>  56
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gatgcctgca gttttccaca                                         20


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<210> 59
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tgctgcacaa gactctcaca                                                20


<210>  63
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<400>  63
ggcacagatc gtccttgatg g                                              21


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tgaacttgca ctaaaggaag ca                                             22


<210>  65
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<400>  65
cagcatttcc ttctgctgtg                                                20

<210>  66
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<400>  66
tgagtgctct tgaaaaacag aaag                                           24

<210>  67
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<400>  67
ttgcggaact tcaagagaaa c                                              21
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<210>  68
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<400>  68
ctggaacaac ttgaagaaca agag                                      24


<210>  69
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acgagctcgg tcctcagaga                                           20


<210>  70
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<400>  70
tcaggtggga gatttggttc                                           20


<210>  71
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<400>  71
tgccgctcat ctaggatgat                                           20


<210>  72
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<220>
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<400>  72
cagcactgga ggacaaatca                                           20


<210>  73
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agtcacaagc cacagtgcag                                            20


<210>    74
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<400>    74
tgctttgaat ggcatgctta                                            20


<210>    75
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<400>    75
cctcaccctc cagtgttgat                                            20


<210>    76
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<212>    DNA
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<400>    76
cctccgcacc atcttctg                                              18


<210>    77
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<400>    77
cagggtcccc gtaggact                                              18


<210>    78
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<210> 79
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<210> 80
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<210> 82
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tttcccagaa atcacgcaat   20

<210> 83
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<220>
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tctttgttca gtgccagctt t   21

<210> 84
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<212> DNA
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accaggtggg tttgtcagag   20

<210> 85
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<210> 88
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gacggttgtg tcggttgg                                              18


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<400>  89
ttggcaactg agtggcatta                                           20


<210>  90
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tgccactcag ttgccaagta                                           20

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cacagtatct ggcggtaagt ca                                        22


<210>  92
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cccagcgctg taagtacaca                                           20


<210>  93
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taagcatgcc attcaaagca                                           20
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<400>    94
caggtgcacg gtcacataag                                              20


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gcagttttcc acactgttgc                                             20


<210>    96
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ctccagattg gccatgattg                                             20


<210>    97
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<400>    97
gccaatctgg aggactgttc                                             20


<210>    98
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agaatccggt cttcccaaac                                             20
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cccaatgatg tggaatctct g                                          21


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agcaatcatc tggtccaagg                                            20


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<400>   101
aagatcggct gtatgccttt                                            19


<210>   102
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<400>   102
caacagtttt ctgtggtttt gc                                         22


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<400>   103
ggatgcatct gtgttacctg a                                          21


<210>   104
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<220>
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gcctgcagtt tttctccatc                                              20




<210>  105
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gctccgcctt gtaatagagc                                              20



<210>  106
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<400>  106
ccaaaggatt cccttttttga                                             20



<210>  107

<211>  20
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<400>  107
gggctggtgc tttagtcaaa                                              20



<210>  108
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<400>  108
aaaatgagga aggccaggag                                              20



<210>  109
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actcctggcc ttcctcattt                                              20


<210>  110
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<400>  110
tgaggaatgg ctgcacttct                                              20


<210>  111
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<400>  111
gcctcgaaaa tttgactgtg a                                            21


<210>  112
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<400>  112
tccaaacttt gtgctgcttt t                                            21


<210>  113
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<400>  113
aaaagcagca caaagtttgg a                                            21


<210>  114
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<400> 114
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<210> 115
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<220>
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<400> 115
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<400> 118
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<210> 120
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<210> 121
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<210> 125
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<400> 125
cattgcagtt gaaagaagaa gaaa   24

<210> 126
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<210> 127
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tctcttcaag gcattctgaa aa   22

<210> 128
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<212> DNA
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<220>
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<400> 128
atccagggca ggaagagact   20

<210> 129
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<212> DNA
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<400> 129

agcggcacga caattatgta   20

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<400>    130
ttttccatta ctttcccaag ga                                              22


<210>    131
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<213>    Artificial

<220>
<223>    artificially synthesized primer seuqnece called MINT23-S

<400>    131
ctgggtcctt gggaaagtaa                                                 20


<210>    132
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<213>    Artificial

<220>
<223>    artificially synthesized primer seuqnece called MINT23-AS

<400>    132
cagcactgga ggacaaatca                                                 20
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